CUYAHOGA VALLEY NATIONAL PARK
Programmatic Environmental Assessment for Riverbank Management
of the Cuyahoga River

Table of Contents

Table of Contents (Continued)

Table of Contents (Continued)

Table of Contents (Continued)

Table of Contents (Continued)

Figures

Appendices

Table of Contents (Continued)

List of Tables

CUYAHOGA VALLEY NATIONAL PARK
Programmatic Environmental Assessment for Riverbank Management
of the Cuyahoga River

Summary

The Towpath Trail and Valley Railway are the most significant linear recreational and cultural features within Cuyahoga Valley National Park (CVNP). These resources occupy the same valley as 22 miles of the meandering Cuyahoga River located within the park, which is the most significant natural resource in CVNP. The Towpath Trail and Valley Railway are threatened in numerous locations by erosion and bank failures of the Cuyahoga River and its tributaries. The National Park Service (NPS) currently addresses this concern through a monitoring program that identifies sites along the Towpath Trail and Valley Railway that are in imminent danger of failure. Stabilization measures are then constructed at the highest priority sites depending on available funding. While this approach is effective in preventing the loss of portions of the Towpath Trail and Valley Railway, its reactive nature mandates the use of a limited array of stabilization measures that may conflict with CVNP's other environmental objectives.

Measures used in the current approach typically consist of a riprap toe constructed to an elevation between the mean discharge and the dominant discharge, and a variety of bioengineering measures above that point to the top of the eroded bank. It also includes such techniques as riprap spurs and bendway weirs. Where erosion moves too close to the Towpath Trail or Valley Railway before riverbank stabilization measures can be constructed, fencing is installed to protect staff and visitors until such repairs can be accomplished. Construction of direct measures often requires the removal of healthy hardwood trees and shrubs on the banks.

A Riverbank Management Program has been developed to replace the current emergency project-based approach to stabilization with a more proactive and holistic management strategy that incorporates both CVNP's historical preservation mandates and its natural resource objectives. While the presently employed techniques will still be required for some locations, a larger number of less intrusive, engineered and non-engineered measures would be implemented at locations where the progress of riverbank erosion has not yet presented an imminent threat to the Towpath Trail, Valley Railway, or other feature, but has the potential to threaten these resources in the future. Techniques included that cannot be utilized in the Riverbank Management Program that are not generally available under the current emergency project-based approach include such actions as: utilizing woody debris and root wads; planting of deep rooting trees between the top of bank and the resource; removing trees that are severely threatened by riverbank erosion before they are felled during a flood event; constructing engineered log jams; encouraging channel cutoffs or reestablishing of meanders where appropriate; and other actions that cannot be utilized when the river is immediately adjacent to the resource. The Riverbank Management Program also includes expansion of the Riverbank Erosion Monitoring Program using an array of techniques to provide a more comprehensive and accurate assessment of the progression of stream meandering and erosion.

The need for this Riverbank Management Program is for the protection of the historic, cultural and recreational resources, employees and the public from the erosional effects resulting from

the fluvial processes of the Cuyahoga River and its tributaries within CVNP. The purpose of this Riverbank Management Program is to establish a clear policy of riverbank management, which will include: preservation and protection the historic, scenic, natural and recreational resources adjacent to the Cuyahoga River and its tributaries within CVNP; provision of safe recreational facilities for the public who use CVNP's resources and for CVNP staff who maintain these resources; minimal interference with the natural processes and ecological character of the Cuyahoga River and its tributaries; and meeting the need in a reasonable, cost-effective manner.

This Programmatic Environmental Assessment (EA) evaluates the potential environmental impacts of the proposed Riverbank Management Program (Alternative 2) as compared to the existing Riverbank Stabilization Program (Alternative 1, the No Action Alternative) in accordance with the requirements of the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations of 1978, NPS Management Policies (NPS, 2001a) and NPS Director's Order #12.

Issues identified from internal and external scoping were translated into the impact topics of water quality; wetlands; floodplains; terrestrial habitat, vegetation and invasive species; aquatic habitat; federally/state listed endangered or threatened species; wildlife; natural river processes; cultural resources; human health and safety; and visitor use/experience. Therefore, the approach to the analysis of potential impacts for the two alternatives was to study the 36 locations throughout CVNP currently being monitored for riverbank erosion.

The analysis showed that Alternative 2, the Riverbank Management Alternative is the Environmentally Preferred Alternative. It has less potential for adverse impacts in all of the impact topics studied. Site-specific planning to be implemented as a part of the Riverbank Management Program includes completion of the Section 106 process of the National Historic Preservation Act for cultural resources. Site-specific planning will also include final coordination with the CVNP NEPA Coordinator prior to a site-specific action.

A Combined Statement of Findings has been prepared, in accordance with Director's Orders #77-1 and #77-2 to assess the potential for wetlands and floodplain impacts, and provide mitigation measures as necessary. In conjunction with the Programmatic EA, an evaluation was made of a segment of the Cuyahoga River that is included in the NPS Nationwide Rivers Inventory (NRI). This included an evaluation of potential adverse impacts to the free-flowing nature of the river and "Outstandingly Remarkable Values" (ORVs) for Scenery, Recreation and Fish. The evaluation concluded that neither alternative would have major adverse impacts on the ORV's, and that the Riverbank Management Alternative would have less potential to affect the free-flowing nature of the river. Potential impacts to the free-flowing nature of the river in the NRI segment would be minimized under the Riverbank Management Program in the selection of techniques employed.

Upon public and agency review it is recommended that a Finding of No Significant Impact be prepared.